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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/628,192

07/28/2003

Michael J. Simons

84218JLT

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10/04/2004

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EXAMINER

CULLER, JILL E

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/628,192

Applicant(s)

SIMONS, MICHAEL J.

Examiner

Jill E. Culler

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 14-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections - 35 USC § 103

2. Claims 1-2, 7-8, 10-13 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP1157825 in view of U.S. PGPUB 2002/051931 to Mori et al.

With respect to claims 1-2 and 23, EP1157825 teaches a method for the preparation of a printing plate comprising forming an oleophilic image on a substrate for a printing plate comprising a support having at least one hydrophilic layer on its surface, the oleophilic image being formed by inkjet printing an aqueous solution or aqueous colloidal dispersion of an anionic oleophilising agent on the surface of the support and drying the applied solution or dispersion, such that on drying, the area of the surface to which the solution or dispersion was applied becomes lithographic ink-accepting, see page 4, paragraph 31, characterized in that the substrate is a metallic, polymeric or paper-based support, see page 11, paragraph 55, coated with a hydrophilic layer which comprises a crosslinked polymer. See page 12, paragraph 56.

EP1157825 does not teach that the crosslinked polymer is a cationic polymer.

Mori et al. teaches a printing plate having a hydrophilic layer comprising a crosslinked cationic polymer. See page 6, paragraph 83.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use a cationic polymer, as taught by Mori et al. in the hydrophilic layer of EP1157825 in order to provide a lower cost, high quality printing surface.

With respect to claims 7-8, EP1157825 teaches the layer comprising a cationic polymer further comprises inorganic particulate material selected from the group consisting of particulate silica, alumina, titanium dioxide and kaolin. See page 12, paragraph 58.

With respect to claims 10-13, EP1157825 teaches the anionic oleophilising agent is selected from the group consisting of hydrophobic organic acids and salts thereof, is polymeric, is selected from hydrophobic organic carboxylates, sulfonates, sulfates, phosphonates and phosphates, see page 4, paragraph 34, and is present in the aqueous solution or aqueous colloidal dispersion in an amount from 0.02 to 5% by weight. See page 11, paragraph 47.

3. Claims 3-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP1157825 in view of Mori et al., as applied to claims 1-2, 7-8, 10-13 and 23 above and further in view of U.S. Patent No. 6,277,498 to Endo et al.

EP1157825 and Mori et al. teach all that is claimed, as in the above rejection of claims 1-2, 7-8, 10-13 and 23, except that the cationic polymer comprises amino groups selected from primary, secondary tertiary and quaternary amino groups, particularly selected from the group consisting of polyalkylenepolyamines and alkylated derivatives thereof, products of addition of alkylcarboxylic acids and polyalkylenepolyamines,

products of addition of ketones and polyalkylenepolyamines, products of addition of aldehydes and polyalkylenepolyamines, products of addition of isocyanates and polyalkylenepolynmines, products of addition of isothiocyanates and polyalkylenepolynmines, products of addition of alkylene oxides and polyalkylenepolyamines and products of addition of polyalkylene oxide block copolymers and polyalkylenepolyamines, or more specifically polyethyleneimine, and that the cationic polymer is present in an amount from 0.01 to 10 g/m² and the inorganic particulate material is present in an amount from 0.1 to 30 g/m².

Endo et al. teaches the cationic polymer comprises amino groups selected from primary, secondary tertiary and quaternary amino groups, particularly selected from the group consisting of polyalkylenepolyamines and alkylated derivatives thereof, products of addition of alkylcarboxylic acids and polyalkylenepolyamines, products of addition of ketones and polyalkylenepolyamines, products of addition of aldehydes and polyalkylenepolyamines, products of addition of isocyanates and polyalkylenepolynmines, products of addition of isothiocyanates and polyalkylenepolynmines, products of addition of alkylene oxides and polyalkylenepolyamines and products of addition of polyalkylene oxide block copolymers and polyalkylenepolyamines, or more specifically polyethyleneimine as a cationic polymer resin, see column 10, line 54-column 11, line 10, and the cationic polymer and inorganic particulate material, as a part of a dried coating liquid layer, present in amounts within the required ranges. See column 14, lines 63-66.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the cationic resins of Endo et al. to further modify the invention of EP1157825 in order to enhance the water resistance of the printing surface.

Response to Arguments

4. Applicant's arguments with respect to claims 1-13 and 23 have been considered but are moot in view of the new ground(s) of rejection.


Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-Th 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jec



Daniel J. Colilla
Primary Examiner
Art Unit 2854